AP
4
.D6

CONTENTS

Aerial Mating of the Great Slug, 356
Australia's War Against the Rabbit, 191

Battle Against Trypanosomes, *by Geoffrey Lapage, M.D., M.A., M.Sc.*, 224, 256
Biology of Centipedes and Millipedes, *by J. L. Cloudsley-Thompson, M.A., Ph.D., F.R.E.S., F.L.S.*, 19
British Association at Belfast, 328

Cajal: Spain's only Nobel prizewinner, 390
Chemical Revolution, *by F. E. Warner, B.Sc., M.I.Chem.E.*, 109
Clifford Troke, *by Leslie Paul*, 83
Coming of Heredity, *by C. D. Darlington, F.R.S.*, 139
Control of the Weather, *by Richard Blair*, 113

Eclipse, 1952, 156
Economic Importance of Ticks, *by D. R. Arthur*, 379
Electric Eels, *by Richard Keynes, M.A., Ph.D.*, 172
Electric Power at 400,000 Volts, *by J. H. M. Sykes*, 27
Electric Whaling, 143
End of the Village Gasworks, 326
Enemies of the Oyster, *by Harold Bastin*, 229
Energy in the Future, *by Prof. F. E. Simon, F.R.S.*, 120, 150
Ethical Dilemma of Science, *by Prof. A. V. Hill, C.H., O.B.E., F.R.S.*, 280

Flowers of the Chalk, 285
Foot-and-Mouth Vaccines, *by Sir Thomas Dalling, D.Sc., F.R.V.S.*, 314
From Woad to Indigo, *by Alexander Barclay, F.R.I.C.*, 243

Gas Turbine in Industry, *by W. E. P. Johnson, A.F.C., C.P.A.*, 76
Geology and Building Materials, *by Frederick A. Henson, B.Sc., Ph.D., F.G.S.*, 273
Geology behind Bricks and Cement, *by Frederick A. Henson, B.Sc., Ph.D., F.G.S.*, 360
Germ-free Laboratory, *by Chapman Pincher*, 53
Germs Defeated, *by R. W. Richards, B.Pharm., Ph.C.*, 288

Habits of British Amphibia, *by Alfred Leutscher, B.Sc.*, 87
Harnessing Solar Energy, 398
History of Puddingstone, *by E. A. Rudge, Ph.D., F.R.I.C., A.M.I.Chem.E.*, 376
How Eggs Are Laid, 94

International Hydrographic Bureau, 22
Invention of Scientific Explanation, *by A. C. Crombie, B.Sc., Ph.D.*, 345
Invention of the Experimental Method, *by A. C. Crombie, B.Sc., Ph.D.*, 391

Jet Stream, *by Jerome Namias*, 386

Mapping Greece from the Air, 384
Massachusetts Institute of Technology, *by P. V. Danckwerts, M.A., S.M.*, 352

Nature of Quicksands, *by C. L. Boltz*, 47

Palace of Discovery, 115
Patterns in Your Head, *by Dr. Grey Walter*, 56
Phosphorus and Life, *by D. P. Hopkins, B.Sc., F.R.I.C.*, 79
Physics Nobel Prize for 1951, 14
Plants Beyond Control, *by Harold Bastin*, 161
Plants of the Sea Coast, 211
Plastic Aeroplane, 93
Pollution of the River Derwent, 92
Prehistoric Animals of the Crystal Palace, *by W. E. Swinton, Ph.D., F.R.S.E.*, 9
Progress in Air Archaeology, *by J. S. P. Bradford*, 177

Remaking Nature in Russian Waters, *by Prof. V. G. Bogorov*, 11
Rockets aid A-bomb Research, 182–3
Royal Botanic Gardens, Kew, *by Sir Edward Salisbury, F.R.S.*, 318

Samuel Pepys, F.R.S., *by Douglas McKie, D.Sc., Ph.D.*, 145, 184, 216
Science in the Schools, *by Dr. Eric James*, 254
Scientific Jargon, 135
Scientists and the Press, *by Derek Wragge Morley, M.A., F.L.S.*, 324
Search for New Antibiotics at the M.R.C. Research Station at Clevedon, 175
Sir Charles Sherrington (1857–1952), 196
Sir William Ramsay (1852–1916), *by F. M. Beatty, M.A.*, 307
Stone Age Trade Route in East Anglia, *by E. H. and E. L. Rudge*, 207
Story of Baird and Television, *by G. Parr, M.I.E.E.*, 247

Technological University: Can Britain Afford Anything Less?, 264
The Cavendish's Golden Year, *by A. W. Haslett, M.A.*, 12
Transplanted Embryos, *by Chapman Pincher*, 323
Two Biologists went to War, 44
Two Glass-blowing Monsters make 1,500,000 Bulbs a Day, 250–3

Underwater Television, *by W. R. Stamp, B.Sc.*, 293

Vermiculite: A Versatile Mineral, *by A. Graham Thomson*, 261
Vivipary in Fishes, *by Chapman Pincher*, 125

Water Pollution Research, *by A. Graham Thomson*, 89
What Do Electronic Computors Prove?, *by Prof. Reginald O. Kapp, B.Sc., M.I.E.E.*, 342
What Phase-contrast Microscopy can reveal, 84
Working Atmospheric Engine, *by Denis Segaller*, 96
World's Most Valuable Birds, 50

AP
4
.D6

CONTENTS

Aerial Mating of the Great Slug, 356
Australia's War Against the Rabbit, 191

Battle Against Trypanosomes, *by Geoffrey Lapage, M.D., M.A., M.Sc.*, 224, 256
Biology of Centipedes and Millipedes, *by J. L. Cloudsley-Thompson, M.A., Ph.D., F.R.E.S., F.L.S.*, 19
British Association at Belfast, 328

Cajal: Spain's only Nobel prizewinner, 390
Chemical Revolution, *by F. E. Warner, B.Sc., M.I.Chem.E.*, 109
Clifford Troke, *by Leslie Paul*, 83
Coming of Heredity, *by C. D. Darlington, F.R.S.*, 139
Control of the Weather, *by Richard Blair*, 113

Eclipse, 1952, 156
Economic Importance of Ticks, *by D. R. Arthur*, 379
Electric Eels, *by Richard Keynes, M.A., Ph.D.*, 172
Electric Power at 400,000 Volts, *by J. H. M. Sykes*, 27
Electric Whaling, 143
End of the Village Gasworks, 326
Enemies of the Oyster, *by Harold Bastin*, 229
Energy in the Future, *by Prof. F. E. Simon, F.R.S.*, 120, 150
Ethical Dilemma of Science, *by Prof. A. V. Hill, C.H., O.B.E., F.R.S.*, 280

Flowers of the Chalk, 285
Foot-and-Mouth Vaccines, *by Sir Thomas Dalling, D.Sc., F.R.V.S.*, 314
From Woad to Indigo, *by Alexander Barclay, F.R.I.C.*, 243

Gas Turbine in Industry, *by W. E. P. Johnson, A.F.C., C.P.A.*, 76
Geology and Building Materials, *by Frederick A. Henson, B.Sc., Ph.D., F.G.S.*, 273
Geology behind Bricks and Cement, *by Frederick A. Henson, B.Sc., Ph.D., F.G.S.*, 360
Germ-free Laboratory, *by Chapman Pincher*, 53
Germs Defeated, *by R. W. Richards, B.Pharm., Ph.C.*, 288

Habits of British Amphibia, *by Alfred Leutscher, B.Sc.*, 87
Harnessing Solar Energy, 398
History of Puddingstone, *by E. A. Rudge, Ph.D., F.R.I.C., A.M.I.Chem.E.*, 376
How Eggs Are Laid, 94

International Hydrographic Bureau, 22
Invention of Scientific Explanation, *by A. C. Crombie, B.Sc., Ph.D.*, 345
Invention of the Experimental Method, *by A. C. Crombie, B.Sc., Ph.D.*, 391

Jet Stream, *by Jerome Namias*, 386

Mapping Greece from the Air, 384
Massachusetts Institute of Technology, *by P. V. Danckwerts, M.A., S.M.*, 352

Nature of Quicksands, *by C. L. Boltz*, 47

Palace of Discovery, 115
Patterns in Your Head, *by Dr. Grey Walter*, 56
Phosphorus and Life, *by D. P. Hopkins, B.Sc., F.R.I.C.*, 79
Physics Nobel Prize for 1951, 14
Plants Beyond Control, *by Harold Bastin*, 161
Plants of the Sea Coast, 211
Plastic Aeroplane, 93
Pollution of the River Derwent, 92
Prehistoric Animals of the Crystal Palace, *by W. E. Swinton, Ph.D., F.R.S.E.*, 9
Progress in Air Archaeology, *by J. S. P. Bradford*, 177

Remaking Nature in Russian Waters, *by Prof. V. G. Bogorov*, 11
Rockets aid A-bomb Research, 182–3
Royal Botanic Gardens, Kew, *by Sir Edward Salisbury, F.R.S.*, 318

Samuel Pepys, F.R.S., *by Douglas McKie, D.Sc., Ph.D.*, 145, 184, 216
Science in the Schools, *by Dr. Eric James*, 254
Scientific Jargon, 135
Scientists and the Press, *by Derek Wragge Morley, M.A., F.L.S.*, 324
Search for New Antibiotics at the M.R.C. Research Station at Clevedon, 175
Sir Charles Sherrington (1857–1952), 196
Sir William Ramsay (1852–1916), *by F. M. Beatty, M.A.*, 307
Stone Age Trade Route in East Anglia, *by E. H. and E. L. Rudge*, 207
Story of Baird and Television, *by G. Parr, M.I.E.E.*, 247

Technological University: Can Britain Afford Anything Less?, 264
The Cavendish's Golden Year, *by A. W. Haslett, M.A.*, 12
Transplanted Embryos, *by Chapman Pincher*, 323
Two Biologists went to War, 44
Two Glass-blowing Monsters make 1,500,000 Bulbs a Day, 250–3

Underwater Television, *by W. R. Stamp, B.Sc.*, 293

Vermiculite: A Versatile Mineral, *by A. Graham Thomson*, 261
Vivipary in Fishes, *by Chapman Pincher*, 125

Water Pollution Research, *by A. Graham Thomson*, 89
What Do Electronic Computors Prove?, *by Prof. Reginald O. Kapp, B.Sc., M.I.E.E.*, 342
What Phase-contrast Microscopy can reveal, 84
Working Atmospheric Engine, *by Denis Segaller*, 96
World's Most Valuable Birds, 50

SUBJECT INDEX

A

Abacus, 344
Abbot, Dr. C. G., 398
Acetate rayon, 373
Acriflavine, 292
Acrylonitrile, 42, 71
Actidione, 29
Actinomycetes, 175
Actitriin, 176
Admiralty Research Laboratory, 293, 296
Adobe, 273
Advisory Council on Scientific Policy, 254
Aedes, 191, 192
Aerial mapping, 384–5
Aeronautics, Progress of, 330–1
Aerotil, 237
Aether, Dirac, 7
—, Huygens's, 6
Affray, H.M.S., 165, 199, 293
Agelena labyrinthica, 304
Agricultural Research Council, 238, 371
Agropyron junceiforme, 211
Air photography, 177 *et seq.*
Aircraft, high-altitude, Special problems of, 332
—, wing shapes of, 332
Akers, Sir Wallace, 163
Albright and Wilson Ltd., 202–5
Alchemical Books, Science Museum exhibition, 231
— Origins of Chemistry, 106
Algae, flora of, 63
Alhazen, 392
d'Alibard, 134
Alkali, synthetic, 110
Allen, Major, pioneer of air archaeology, 177–9
Alpha rhythm, 56
Amazon Water Lily, 318, 320
American rough tingle, 229
Aminacrin, 292
Amoeba's 'Tail', 328
Analysis and synthesis, 391
Anaximander, 348
Anaximenes, 348
Anderson, D. C., 14
Anglo-American co-operation in atomic weapon development, 337
— Productivity Council, report on technical education and U.S. universities, 2
Antibiosis, 289
Antibiotic mothproofing agent, 29
Antibiotics, 175, 288, 339
—, effects of, on pigs, 238
— in Chicken Food, 330
— Research Station, 175
Anticyclones, 390
Antimalarial, new, 401
Antimalarials in Korea, 29
Antimony, 228
Antimosan, 228
Antiseptic, 288
— dyestuffs, 292
Antrycide, 227
Apatite, 79
Appert's Bicentenary, 35, 166
Appointment in H.M. Colonial Service, 372
Archimedes, 350, 391
Arco Proving Ground, 205
Argasid ticks, 382–3
Argon, 308
Arid Zone Conference, 200
—— research, committee on, 368
Aristotle, 139, 379, 391
Arrhenius, Svante, 269
Artificial Illumination of Seedlings, 298
— radioactivity, 12
— textile fibres, 373–4
Aseptic surgery, 289
Ash, 341
Ashmole, Elias, 217
Assessment of Personality, 334
Astrolabe, Arab, 392
Astronomical work by Chaucer, 231
Atmospheric circulation, 386
— engine, 97
— pollution, 340
Atomic bomb, British, 107, 182–3
— Engine for Ships, 205
— Power for Aircraft, 333
— Scientists' Association, 63
Atom-bomb production, British, 7
— -smashing apparatus, 14
Atoxyl, 226
Audioscopiks, 238
Aureomycin, 65, 175, 237, 339
— in diet, 198, 238, 330
'Aurofac', 238
Australia, myxomatosis and rabbit control, 42
Australian scrub tick, 382
Autoclave, 36, 53
Automatic boiler-house control equipment, 343
— Digital Computer, 30
Aviation medicine, 332
Avicenna, 393

B

Babesiosis, 380
Babylonian astronomy, 346, 391
'Back pressure' turbine, 123
Backward-facing seats in aircraft, 332
Bacon, Francis, 106
—, Roger, 106, 393
Bagnold, Brigadier, R.A., 48
Baird, John Logie, 247
BAL, 228
— -*OXO*, 228
Barlow Committee on Scientific Manpower, 201
Barnacle, Acorn, 230
—, New Zealand, 230
Basalts, 277
Basidiomycetes, 175
Battelle Institute, 402
Battersea Power Station, 341
Bazalgette, Sir Joseph, 104
B.B.C., 247
Beam-splitting device, 239
Becquerel and Radioactivity, 400
Bee Orchid, 287
Behaviour of bees, 329
Benham's top, 170
Bentham, George, 319
Benzalkonium Chloride, 291
Bergin, Dr. K. G., 332
Beryllium poisoning, an antidote for, 64
Bidwell's Ghost, 170
Biological Warfare, 42
Biology, careers in, 371
—, Institute of, 371
— of deserts, 367
—— Flying, 332
Birch, Thomas, 184
Birch's *History of the Royal Society*, 184, 222
Blackett, P. M. S., 13
Blackflies, 191, 192
Blakeney Point, 285
Blaniulus, 19
Bleaching powder, 110
Blowflies and Slaughterhouses, 65
Blue Lias limestone, 365
Boat-building, 298
Boiler-house control equipment, automatic, 343
Boltz, C. L., 231
Bombay Plan of 1944, 281
Bombyx mori, 304
Bone ash, 203
Bonnet-limpet, 229
Books about Coal, 166
Boophilus annulatus (Texas fever tick), 380
Boyle, Sir Robert, 107, 147, 188, 202
Boyle's Hydrometer, 218
Brabazon, Lord, 265
Bragg, Sir William, 47
Braille, Louis, 65
Brain image, 57
—: originator or instrument?, 344
— -prints, 56
Bramble (*Rubus fructicosus*), 348
Brick-making, 362
Bricks, 360
—, moulded, 362
—, wire-cut, 362
Brilliant Green, 292
Britain's M.I.T., 338
British Association, 280, 328
——, children's lectures at, 197
— Herpetological Society, 88
— Horological Institute, 231
— Institute of Management, 2
— *Medical Journal*, 237
— Standard Specifications, 168
de Broglie, Prince Louis, 231
Bronowski, Dr. J., 138
Brooks, F. A., 398
Brouncker, Viscount, 146, 187, 219, 220
Bruun, Dr. Anton, 239
Buck's Horn Plantain, 214
Bugs, blood-sucking, 256
—, Kissing, 256
Building and local geology, 278
Bullard, Dr. E. C., 398
Bulletin of the National Research Council, 398
Bullough, Prof. W. S., 329
Burch, Dr. C. R., 4
Burnet, Sir Macfarlane, 402
Burrowing sponge, 230
Butadiene, 71
Butane gasworks, 326
Butarsen, 226
Butement, W. A. S., 400
Butler, Dr. C. G., 329
Butyl rubber, 71
Buxton, Jedediah, 101

C

Cairns, Sir Hugh, 297
Cajal, Santiago Ramon y, 390
Caldecote, Lord, 266
Calgon, 204
Calico Printers Association, 374
California Agricultural Experimental Station, 398
Callippus, 350
Calverley, Lord, 266
Cambridge, School of Agriculture, 371
Canning process, 35
Carbolic acid, 288
Carboniferous rocks, 360
Careers in Biology, 371; in Physics, 255
Carline Thistle, 286
Carothers, Dr. Wallace H., 373
Carron Iron Works, 109
Caspian Sea, 11
'Catalytic Cracking', 235
Cathode-ray tube, 249
Cavendish, Henry, 310
Cement clinker, 364
Cephalosporius, 176
Cetavlon, 291
Cetrimide (CTAB), 291
Chadwick, Sir James, 13
Chaffinch, 103
Chagas, Prof., 172
Chain, Prof. E. B., 29
Chalazae, 94
Chalk, 278
— Ragwort, 286
— Scabious, 286
— Violet, 284
Challenger, 239
Chang, Dr. M. C., 323
Chaucer's Astronomical Work, 231
Chelsea College, 184
Chemical control and locusts, 43
— Microbiology, Internat. Centre, 29
— Research Laboratory of D.S.I.R., 374
— Revolution, The, 109
Chemicals and foodstuffs, 328
Cherwell, Lord, 7, 49, 264
Chicago University, Metallurgical Laboratory of, 17
Chick-Martin test, 292
Chicory, 286
Children's lectures at British Association, 197
Chlorcresol (PCMC), 290
Chloromycetin, 175, 339
Chloroquin, 29
Chlorxylenol (PCMX), 290
Cholinesterase, 102
Chromatoiulus, 21
Churchill, Mr., 7, 337, 400
Circulation of the atmosphere, 386
Civil Defence, Scientists for, 64
— Service Science, 65
Clarendon Laboratory, 74
Claytonia, 161
Clearing vegetation, and tsetse fly, 257
Clerk Maxwell, 6
Cloud Chamber, 199
Clow, Dr. and Mrs., 109
Coal, 76, 123, 340
—, economic price of, 340
— fires, 341
—, fluidisation of, 235
—, inland consumption of, in Great Britain in 1950, 69
— -pipeline, a projected, 235
—, saving of, 138, 150
— -tar, 112
Coates, Dr. M. E., 330
Cob, 273
Cockcroft, Sir John, 12, 14, 15, 337
Cockcroft, Nobel Prize for Physics 1951, 14
Colombo Plan, 280
Colonial Office, 371
— Research Service, 371
Comet jet airliner, 331
Common Starfish, 229
Common Toad, 87
Commonwealth Institute of Entomology, 371
Conglomerates, 376
Coprolites, 82
CORA, 60
Cormocephalus multispinus, 21
Cosmic rays, 13
Cotton Thistle, 286
Cox, Dr. H., 402
—, Ian, 64
Coxsackie viruses, 338
Crab, green shore, 229
Crawford, O. G. S., 177
Cresol, 290
Crookes, Sir William, 308, 310
Croone, William, 221
'Crop-marks', 178
Cross-Channel link, 306
Cryptops, 18
Crystal Palace, 9
Cudbear, 111
Culex annulirostris, 191, 192
Curie, Mme, 401
Cyclones, 390
Cyclotron, 13

D

Dakin's solution, 291
Danielli, Prof. J., 372
Darlington, Dr. D. C., 205–6
Dartford Iron Works, 38
Darwin, Charles, 271
Darwinism: The Substance and The Shadow, 205
—, Soviet creative, 271
Davey, H. G., 231
Davy, Sir Humphry, 307
DDT, 65, 90, 256, 328
— fails against Korean Lice, 102
De Lor, 134
Deduction, 391
Deep-sea Bacteria, 239–41
Demand for Scientists, 201
Democritus, 349
Dependence of Atomic Energy Programmes on Chemists, 328
Descartes, René, 396
Desert locust, 368
— research, 113
Desiccated Harvests, 272
Devonian Old Red Sandstone, 376
Diary of Robert Hooke, 184
Dickson, J. T., 373–4
Dicoumarol, 374
Diesel locomotives, 71
Digital computor, Manchester University's Automatic, 30
Dimidium bromide, 228
— chloride, 228
Dinitro-ortho-cresol, 43
Dinosaurs, 9
Dipodomys, 367
Dirac, Prof. P. A. M., 7, 14
Diseases and aircraft, 332
Disinfectant, 288
Disposal of industrial wastes, 91
Distillation, 112
—, fractional, 311
Dock and harbour work survey by underwater television, 296
Dogfish, American, 127
Dogfish, common, 125
—, observation of, by underwater television, 295
—, smooth, 125
—, spiny, 125
Dogger Bank, 80
Domagk, Gerhard, 291–2
Dome of Discovery, 129
Domiphen bromide, 291
Donkin, Bryan, 38
Dourine, 224–5
Drebbel, Cornelis van, 223
'Dry ice', 114
Dundonald, Earl of, 110
Dvoryankin, Prof. Fyodor, 271
Dwarf Thistle, 286
Dyer's Isatis, 243
Dyestuffs, antiseptic, 292
Dying, vat, 243

E

Eclipse 1952, 156–9
Ecology, 285
Economic Importance of Kew Gardens, 319
Edinburgh, Duke of, 280, 328
Edison, 373
Education, Part-Time Technical, 1
Eel's electric organ, 172
Effects of hormones on the skin, 329
Efficiency of aircraft propulsion, 330
—— gasworks, 326
—— power utilisation, 124
Ehrenhaft, Prof., 299
Einstein's equation of mass and energy, 13, 72, 151
El Dorado Mining Company, 303
Electric fire, 69
— lamp bulbs, automatic production of, 250
— Power, Swedish high-voltage, 27
— Whaling, 143
Electro-encephalograms, 56
Electron microscope, EM4, 267
Electronic brains, 342
— circuits, 60
— digital computors, 342
Elements of Geometry, 349
Elodea canadensis, 161
Empedocles, 391
Empusa grylli, 43
Energy, 120, 150
—, free, 121
—, heat, 121
—, nuclear, 151
—, solar, 154
English rough and smooth tingle, 229
Enuma Elish, 347
Enzymes, 31
Epilobium angustifolium, 161
Epizootic Diseases, Inter-African Bureau of, 64
Eryngium maritimum, 211
Ethomid, 198
Euclid, 349
Exhibition of 1851, 9
—, South Bank, 238

F

Fabricius, 94
Faraday medal, 99
Fièvre boutonneuse, 383
Fish, effects of poison on, 91
Fisheries Research, film about, 29
Fishes, ovo-viviparous, 127
—, viviparous, 125
Fixed resistor, 168
Flash pasteurisation, 38

Flat cable, 299
Fleming, Sir Alexander, 175
Flies, horse, 256
—, stable, 256
Floating in liquid, 47
Flora of algae, 63
Florey, Sir Howard, 175, 176, 289
Fluidisation, 235
Food, heat sterilisation of, 36
Foot-and-Mouth Disease, 170
—, effects of, 170
—, immunity to, 171
—, slaughter policy, 171
—, vaccination against, 170
Fox, Sir Cyril S., 130
Fractional distillation, 311
Franco-British television, 270
Frankel, O. H., 65
Franklin, Benjamin, 134
Fraser, D. C., 335
Free, J. B., 329
Freeman, I. M., 65
Freeth, F. A., 72
Freiberg, Theodoric of, 394–5
Frenkel, Dr. H. S., 314
Frenkel method of virus production, 315, 317
Fresh Water Biological Association, 91
Friedwald, E. M., 65
Friese-Greene, 238
Frog, Common, 87
—, Edible, 87
—, spawning of, 87
F.R.S.s elected 1952, 163
Fuel and Power Policy, 339
— Saving, 138
Fulbright Scheme, 133
Fulmer Research Institute, 370, 402

G

Galathea, 239
Galen, 396
Galinsoga parviflora, 160
Galton, Francis, 142
Gammexane, 90, 103, 256
Gas laws, 111
— turbine, 76
—— locomotive, 70
— -turbo-electric locomotive, 267
—, waste-heat system, 76
Gasworks, efficiency of, 326
Geiger counters, 303, 313
Gel, 48
Generators, hydro-electric, 27
Genetic neurology, 390
Gentian Violet, 292
Geological Magazine, 377
Geological Periods, 279
Geophilus, 20
Geosyncline, 274
Gerard, 161
Germ-free Laboratory, 53–5
Germicide, 288
Gibb, Sir Claude, 113
Gibb's Phase Rule, 72
Glass manufacture, materials for, 252
Glomeris, 18
Goldacre, Dr. R. J., 328
Golgi, Camillo, 390
Gott, Benjamin, 111
Granit micro-electrode, 170
Granites, 275
Great Orb-weaver, 304
— Slug (*Limax maximus*), 356
Greatorex, Ralph, 217
Greece, aerial mapping of, 384
Greek astronomy, 350, 391
— conception of scientific explanation, 346
Green shore crab, 229
Gregory, Sir Richard (1864–1952), 368
Gresham College, 146
Grey Plantain, 286
Grid system, 306
Grosseteste, Robert, 393
Ground Pine, 284
Guano, 50, 51, 82, 113
Gunn, D. L., 43
Gymnarchus, 174
Gymnotid, 172
Gyorgyi, Dr. Albert Szent, 99
Gypsum plasters, 364

H

Hahn, Otto, 313
Halban, Dr., 74
Hall, John, 38
—, Viscount, 265
Halsbury, Lord, 266
Hammock web, 304
Hannay, J. B., 308
Hartley, Dr. David, 61
—, Sir Harold, 333
Harvey, William, 396
Harwell, 16
Harworth Factory, 250
Heat Sterilisation of food, 36
— pump, 122
Heavy alloy in aircraft, 298
— hydrogen, 13
— water, 13
Helium, 310
Herakleides of Pontus, 350, 351
Heredity, 139, 345
Herklots, Dr. G. A. C., 371
Hertfordshire Conglomerate, 207
High-altitude flying, 332
— laboratories, 231
— -speed winds, 386
Hill, Dr. D. W., 329
—, Prof. A. V., 169, 280, 328
Himsworth, Sir Harold, 371
Hoblyn, Dr. E. H. T., 334
Hoffman kilns, 362
Hooke, Robert, 47, 146, 147, 148, 149, 185, 220, 221
Hooke's *Micrographia*, 188
Hooker, Sir Joseph, 319
—, Sir William, 319
Hopkins, Sir Frederick Gowland, 236
Hortus Kewensis, 318
Hot Desert Research, 367
How Bees Defend their Hives, 329
— Synthetic Fibres have Revolutionised the Textile Industry, 329
Hutchings, V. W., 386
Hutchinson, Capt. O. G., 248
Hyalommi aegypticum, 382
Hybrids, 140, 345
Hydraulics Research Station D.S.I.R., 104
Hydro-electric generators, 27
Hydrogen, liquefaction of, 311–12
Hydrographic Bureau, International, 22–3
Hydroschendyla, 20
Hylaeosaurus, 9

I

IBM Electronic Selective Sequence Machine, 344
Ibn Al-Haitham, 392
— Sina, 393
Icknield Way, 207
I. G. Farben, 99
Iguanodon, 9
Illingworth, Prof. G. F. W., 335
Image orthicon, 294
Immunity to foot-and-mouth, 171
Imperial College of Science and Technology, 267, 338
Imperial College of Tropical Agriculture, 371–2
Importance of chemical engineers, 333
Index Kewensis, 319
Indian National Physical Laboratory, 398
— Planning Commission, 281
Indigotin, 243
Indigo-woad vat, 246
Inductive procedure, 345
Inert gases, 310, 313
Infantile paralysis, 65
Inoculation of rabbits, 191
Insecticides, organo-phosphorous, 102
—, systemic, 102
Inspection of ships' hulls by underwater television, 296
Institute of Biology, 371
—— Physics, careers booklet, 255
———, Glasgow exhibition, 267
—— Technology, Loughborough, 402
Institution of Chemical Engineers, 1
Inter-African Bureau of Epizootic Diseases, 64
International Centre for Chemical Microbiology, 29
— Congress of Internal Medicine, 338
— Pharmacopoea, 63
Into the Spider's Web, 304
Iodine, 290
Isotopes, 152
Iulus, 19
Ivanov, S. P., 239
Ixodid ticks, 382–3

J

Jabir ibn Hayyan, 393
Jenkin, Prof. Fleming, 206
Jenyns fish, 127
Jerboa, 367
Jersey Crocus, 212
Jet stream, 386–9
Jodrell Laboratory, Kew, 319
John Innes Compost, 298
Joliot-Curies, 12–14
Jones, R. V., 39
Judaei, Themon, 394
Juniper, 284

K

Kangaroo Rat, 367
Keeping Warm and Going, 69
Keir, James, 110
Keith-Lucas, Mr., 332
Kekulé, 269
Kelp, 110
Keuper marl, 360, 364
Kew Gardens, 318–21
Kimball, Dr. H. H., 398
Kimmeridge clay, 361–2
Knickebein apparatus, 39
Koch, Ludwig, 103
—, Robert, 289
Krilium: new soil-improver, 39, 237
Krypton, 311

L

Laboratory Animals Bureau, 99
Lamarckian ideas in Darwinism, 206
Laminates, 93
Lawes, 81
Lawrence, Prof. E. O., 13
Learning by association, 58
Leblanc, 110
Lederle Laboratories, 402

Leonardo da Vinci, 134–7
Less Smoke, More Heat, 340
Leucippus, 349
Liebig, 38, 81
Lightning conductor, 134
Light-sensitive cells, 56
Lilly, William, 217
Limestones, 278
Lindane, 103
Linfoot, Dr. E. H., 2, 4
Linnaeus, 285
Linyphiidae, 304
Liquefying of gases, 308
Liquid air, 311
Lissmann, Dr. H. W., 174
Lister, Joseph, 288
Lithium atom, 13, 14
Lithobium, 18
Lizard Orchid, 287
LOBUND, 53
Local Geology and Building, 278
Lockspeiser, Sir Ben, 330
Lockyer, Sir Norman, 368
Locomotives, efficiency of, 71
—, diesel, 71
Locust, chemical control of, 43
—, desert, 368
—, red, 43
London Airport, 331
—, The Great Fire of, 149
—, The Plague in, 147
Loughborough College, 338, 402
'Louping-ill', 380–1
Low Temperature Research Station, Cambridge, 303
Lysenko, Trofim, 139, 141, 206, 271
Lysol, 290

M

'Machine language', 343
Mackintosh, Charles, 111
Magnesium alloys, new developments, 331
Magnus, Albertus, 393
—, Dr. Herdis von, 338
—, T. Albertus, 106
Mal de Caderas, 224–5
Malaria, 29
Man Orchid, 287
Manchester College of Technology, 338
Marden, W. G. R., 323
Marram grass, 211
Marsh Samphire, 211
Martin, L. H., 400
Massachusetts Institute of Technology, 264–7, 338, 352 *et seq.*, 398
——, Chemical Engineering Practice School at, 354
Mass spectrometer, 151
Mass 2, heavy hydrogen atoms of, 13
Mass-energy relationship, 13
Mat plants, 286
Materials for glass manufacture, 252
McMillan, Prof. E. M., 16, 17
— Nobel Prize for Chemistry 1951, 16
Meara, B. G., 373
Medical Research Council, 175, 371
Medicinal herbs, 130
Meetham, Dr. R. A., 340–1
Memory device, 60
— of the Prodigy, 101
Mendel, Gregor, 140, 206, 345, 393
Metallurgical Laboratory of Chicago University, 17
Metchnikoff, Ilya, 55
Michurin, I., 271
Microbiologists, demand for, 372
Microbiology, International Centre for, 29
Micrococcin, 176
Microscopes, 17th-century, 187
Milling machine, numerically controlled, 354
Millions fish, 125
Millipedes, damage done by, 19–21
'Miniaturisation', 168
Mint, the, 219
M.I. Science, 39
M.I.T. Scholarships, 268
'Molotov Cocktail', 204
Monte Bello Bomb, 337, 400
Moon minnow, 128
Moore, Jonas, 216
Moral Obligation of Scientists, 169
Mothproofing with antibiotics?, 29
Moulded bricks, 362
M.R.C. Unit Research in Toxicology, 102
— Antibiotics Research Station, 175
Mus musculus, 375
Myxomatosis, 42, 191

N

Nagana, 224–5
Napier, John, 218
National Institute of Industrial Psychology, 334–5
— Research Development Corporation, 399
Natterjack, 87
Nature, 368
Neocryl, 226
'Neo-Darwinism', 206
Neomycin, 175
Neon, 311
Neotony, 87
Neptunium, 17
Netropsin, 29
Neurohistology, 390
Neutron, 13
New Antimalarial, 401
— Vitamin?, 236
New York ground shark, 127
Newcomen, Engine, 96, 110
Newitt, Dr. D. M., 333
Newton, Isaac, 107, 397
—, *Principia*, 185
Newts, British Smooth, 87
Night sky, 29, 63, 99, 130, 165, 199, 232, 267, 297, 336, 369, 401
Nipkow Scheme, 247
Nobel Prizes 1951:
——, Cockcroft, Sir John, 12, 14
——, Mcmillan, Prof. E. M., 16
——, Seaborg, Prof. G. T., 16
——, Theiler, Dr. Max, 30
——, Walton, Prof. E. T. S., 12, 14
Norway haddock, 127
Nuclear energy, prospects for, 153
— fission, 152
— fuel, 205
— reactors, 152
— research, council for, 131
Nuclei, alignment of, 74, 75
—, nature of, 151
Numerically controlled milling machine, 354
Nuttall, G. H. F., 379
Nylon, 329, 373–4

O

Ockham, William of, 393
Oil pollution and sea-birds, 268
OMPA, 102
Ophistreptus, 21
Optics, Revolution in, 2
Orb-web, 304
Orchids, 287
Organo-phosphorous insecticides, 102
Origin of Species, 205–6
Orrery, 166
Orsanine, 226
Otacousticon, the, 149
Otobius megnini, 383
Owen, Prof. Richard, 9
Oxalis corniculata, 162
— *stricta*, 162
Oxford clay, 361
Oysters, 229

P

Pacific coast tick, 383
Paint, therapeutic use of, 129
Palace of Discovery, The, 115
Pangenesis, 139
Papin, 36
Paracelsus, 106
Paradesmus, 20
Parathion, 102
Parmenides, 348
Partington, Prof. J. R., 106
Part-time Technical Education, 1
Pasteur, Louis, 35, 288
Pavlov, I., 59, 271
Peddar Way, 207
Penicillin, 339, 402
Penney, Dr. W. G., 337, 339, 400
Pentoxide, 79
Peptic Ulcers, 335
Pepys, Samuel, 145 *et seq.*, 184 *et seq.*, 216 *et seq.*
Perbunan, 71
Periodic law, 307, 308
— Table, 307, 308, 311
Perognathus, 367
Persia, Air Archaeology in, 179
Personality, patterns of, 61
Peter (Peregrine) of Maricourt, 396
Petrochemicals, 71
Phase rule, 72
Phase-contrast microscopy, 4–5, 84–5
Phenanthridinium, 228
Phenol, 288
Phenylacetylethyl hydroxycoumarin, 375
Philips recessed head screw, 168
Phosphate, 79
—, rock, 82, 203
Phosphorus, 79
—, amorphous, 203
— currency, 82
— cycle, 79
—, effect of, on health, 203
— necrosis, 203
— outside the Laboratory, 202
'Phossy jaw', 203
Photogrammetry, 384
Photographic maps, 385
Physical Society Exhibition, 169
———, Colour group of, 170
Pickling, 36
Pigmy top-minnow, 127
Pimlico district heating scheme, 138
Piroplasms, transmission of, 380
Pisé de terre, 273
Piston core sampler, 240
Plankton, 79
Plants can Absorb Water from Fog, 335
Plastics for aircraft construction, 93
Plato, 349, 391
Plutonium, 152
— bomb, 337
—, British production, 107
Plym, H.M.S., 400
Pneumatic conveying, 235
Poincaré, 400
Polar Front, 390
Polaroid, 170
— filters, 239
Poliomyelitis, 338–9

Poliomyelitis virus, growing in eggs, 402
Poly-anions, 42
Polymers, 373
Polyxenus, 18
Polyzonium, 19
Port of London Authority, 104
Posidonius, 392
Positron, 14
Potash felspar, 277
Poulsen, Holger, 103
Prehistoric Flint Mines, 209, 378
Preservation of semen, 323
Priestley, Joseph, 107, 134
Prince Rupert's drops, 184, 220
—— glass factory, 184
Production of light bulbs, 253
Proflavine, 292
Progress of Aeronautics, 330–1
'Prontosil Rubrum', 292
Proteroiulus, 20
Prothrombin, 375
Prout, William, 308
Prussian blue, 111
Pterodactyls, 8
Ptolemy, 349, 391
Puddingstone, 207, 376–8
Pugmill, 362
Pyrimethamine, 401
Pythagorean Brotherhood, 348–9

Q

Quartz, 277
Quaternary Ammonium Antiseptics, 291
Quicksands, 47

R

Rabbit eggs, transplanting of, 323
Radioactive sewage, 89
— Tracers in Bee Research, 329
Radioactivity, artificial, 12
—, Becquerel and, 400
Radok, U., 386
Radon, 312
Rainbow, explanation of, 393–6
Rainfall and fertility, 113
Rampion, 286
Rat-repellant, 29, 374
Rats, new means of killing, 374–5
Rayleigh, Lord, 308, 310
Reclaim, H.M.S., 293
Red Fescue, 286
— Locust, 43
Redwater fever of cattle, 380
Refrigerators, 122
Register of biological consultants, 232
Reith, Lord, 247
Relapsing fever, 379
Retting, 91
Revival of the Aether?, 6
Revolution in Optics, 2
Reyniers, J. A., 53
Rhazes, 393
Rhipicephalus appendiculatus, 380–3
Rhodesian redwater or African coast fever, 380
Rhyolites, 277
Ribbands, C. R., 329
Ribbon machine, 250
Richmann, 134
Rickettsia, 380
Rideal-Walker Test, 291
—— coefficient, 291–2
Ridley, Lord, 339
River Tees, 91
Roberts, Prof. Oliver, 335
Robot pilot, 99
Roccal, 370
Rocket motor, 331
Rock Samphire, 213
Rocks, 273
Roebuck, Dr. John, 109
Röntgen, 400
Rosette plants, 286
Rossby, C. G., 386
Royal Naval Scientific Service, 293
— Technical College, Glasgow, 338
Rubber, synthetic, 71
Rubus fructicosus (Bramble), 348
Russian View of Darwin's Theory, 271
Rutherford, Lord, 312

S

Safety-match, 203
Salicornia, 211
Salisbury, Sir Edward, 285
Salmon, 91
Salt, 109
Samuel, Lord, 202, 264
Sand Couch Grass, 211
Sandstone, 278
Savory, Theodore H., 304
Scanning, 57
Scheele, 36, 107
Schizophyllum, 21
Schmidt camera, 2–4
—, Erich, 179
Schmidt-Nielsen, Dr. Knut, 367–8
Schmidt-Waldmann method of virus production, 315, 317
School of Pharmacy, 298
— television, 129
SCHRADAN, 102
Schrader, Dr. Gerhard, 102
Schrotter, Prof., 203
Science in Industry: Survey by Manchester Research Council, 283
— teachers, 254, 265
Scientists, demand for, 201
Scolioplanes, 20
Scolopendra, 18
Scolopendromorpha, 18
Scripps Institution of Oceanography, 239
Scutigera, 20
Sea Coast, Plants of the, 213–15
— snails, 229
— trout, 91
Sea-bed survey, 294
Seaborg, Prof. G. T., 16, 17
— Nobel Prize for Chemistry 1951, 16
Security for Scientific Secrets, 49
Selective-protective gear, 342
Self-heating food cans, 39
— -locking nut, 168
Semen, preservation of, 323
Semmelweiss, Ignace Philippe, 288
Septicaemia, 288
Setterwort, 284
Severn Barrage Scheme, 138, 150
'Shadow-marks', 178
Shape of Wings to Come, 322
Sheep's Fescue, 286
Shotton, Prof., 368
Sial, 274
Silver iodide, 114
Sima, 274
Simon, Prof. F. E., 74, 138
Sleeping sickness, 224
Slender Thistle, 214
Slipper-limpet, 229
Smithsonian Institution, 398
Smoke Abatement, 341
—— Conference, 138
Smout, Sir Arthur, 167
Society of British Aircraft Constructors, 93
Soda, felspar, 277
— synthetic, 110
Soddy, Dr., 312
Soil erosion, 82
— fixation, 80
Soil stabilisation, 275
— -conditioner, 39, 237
'— -marks', 178
Solar eclipse 1952, 156
— energy, 398–9
——, utilisation of, 286
Sondes Place Research Institution, 402
South Bank Exhibition, 238
Space heating, 123
Spartina townsendii, 211
'Spat', 229
Spherical aberration, 4
Spider's silk thread, thickness of, 304
Spirochaetes, 379
Spotted fever, 382
Spraying of crops by air, 272
Starfish, Common, 229
Steam-engine, 96
Stereochemistry, 269
Stereoscopic films, 238
Stickfast fleas, 191, 192
Sting-ray, 125
Stradling, Sir Reginald, 130
Stratosphere, 386
— flight, 200
Streptodornase, 31
Streptokinase, 31
Streptomycin, 175, 339
—, Nobel Prize for, 402
Styrene, 71
Sugar beet waste, 90
Sulpha drugs, 292
Suramin, 226
Surf-fish, 125
Surra, 224–5
Svend Foyn harpoon, 143
Sweden, high-voltage electric power, 27
Swedish Match Corporation, 203
Synthetic alkali, 110
— fibres, 329
— rubber, 71, 73
— soda, 110
— vitamins, 237
Systematic measurements, introduction of, 397

T

Tachypodoiulus, 19
Tailless delta-wing aircraft, 333
Tar acids, 90
Tartar emetic, 228
Technical and Scientific Register, 372–3
— Education, part-time, 1
— Progress in Radio Industry, 168
Technological Progress in the U.S.A., 264
Technology and myths in ancient Mesopotamia and Egypt, 346
Telekinema, 238, 239
Teleosaurus, 8
Television, 247–9
—, Baird and, 247
—, British contribution to, 165
— cameras, 294
— films about science, 198
—, Franco-British, 270
—, miniature camera, 232
—, underwater, 199, 293
Tennant, Charles, 110
TEPP, 102
Terephthalic acid, 374
Terramycin, 175, 339
— *v.* Pneumonia, 268
Terylene, 329, 373–4
Texas fever ticks (*Boophilus annulatus*), 380
Thales, 348
Thames, scale model of the, 104
Theiler, Dr. Max, Nobel Prize for Medicine, 30
Theileria parva, 380
Theophrastus, 391

Thermocline, 80
Thermodynamics, First Law of, 74, 120
—, Second Law of, 121
Thermo-nuclear reaction, 151
Theta rhythms, 62
Thiocyanate, 90
Thiosemicarbazones, 292
Thistles, 286
Thixotropy, 48
Threlfall, Richard, F.R.S., 204
Thrift (Sea Pink), 214
Tick worry, 381
Ticks, 379–82
Tidal Power, 150
Timaeus, 349
Times, The, 133, 247
Tingle, English rough, 229
Titterton, Dr. E. W., 400
Tizard, Sir Henry, 204
Todd, Prof. R. A., 99
Torpedo, electric ray, 172
Tortoise, 63
Toxicology, M.R.C. Research Unit, 102
Training for university graduates, 167
Transfer of Training, 335
Transmitting Electric Power across the Channel, 306
Transplanting of fertilised rabbit eggs, 323
Travers, Dr. Morris, 310, 311, 312
Triazine arsenious acid, 226
Triphosphoridinenucleotide, 64
Troke, Clifford, 83
Tropopause, 388
Trypanosomes, 224–8, 256–60
Tryparsamide, 226
Tsetse flies, 224–5, 228, 256, 368
Tubbs, Ralph, 64
Tungsten alloy in aircraft, 298
Turner, William, 318
Twins, one-egg and two-egg, 141–2
— and crime, 142
Two Agricultural Discoveries, 237
Tyndall, John, 280, 283
Tyte, Dr. L. C., 400

U

U235, U238, 152
Ultra high-speed shutter, 267
Underwater Television, 199, 293
Universities and Specialists, 167
University Grants Committee, 264–6
Uranium, 63
—, Canadian, 303
— in Australia, 197
— salt, 401
U.S. Emigration, 133
U.S. Weather Bureau, 386
Uses of inert gases, 313
Utilisation of Solar Energy, 268
Uvarov, Dr., 368

V

Vaccines for foot-and-mouth, 170
Van Helmont, 106
van't Hoff, 72, 269
Varidase, 31
Vat dyeing, 243
Vavilov, Sergei, 206
Verhaeghe, Oscar, 101
Vermiculite, 261–3, 365
Vernon, Prof. P. E., 334
Victoria amazonica, 320
Village gasworks, 326
Vincke, Dr. I. H., 401
Virus production, Frenkel method, 315–17
——, Schmidt-Waldmann method, 315–17
Virus Research: the need for human experiments, 338
Viscose rayon, 373
Vitamins, synthetic, 237

W

Waksman, S. A., 402
—, Nobel Prize for Medicine 1952, 402
Walsh, John, 172
Walton, Prof. E. T. S., 12
—, Nobel Prize for Physics 1951, 14,
Wansbrough-Jones, Dr. O. H., 400
Wardlaw, Prof. W., 328
Warfarin, 375
Water, 113
— pollution, 89
— — Research Laboratory, 89
— power, 157
Watson-Watt, Sir Robert, 129
Watt, James, 96
Waverley, Lord, 265
Weather Control, 113
Web-spinners, 304
Weeds, 161
Wellcome Laboratories, 401
Whinfield, J. R., 373–4
Whitland Experimental Gasworks, 326–7
Whittaker, Sir Edmund, 6
Williams-Hunt, 177
Wilson, C. T. R., 199
Wire-cut bricks, 362
Witelo, Silesian physicist, 394
Woad, flowers, 242
Woolton, Lord, 201, 264, 338
Woomera rocket range, 107
World List of Scientific Periodicals, 165
Wright Brothers, 330
Wright, Dr. Norman C., 368

X

Xenon, 311
X-rays and Pig Breeding, 303
Xylenol, 290

Y

Young, Prof. F. G., 236
Yudkin, Prof. John, 237

Z

Zangwill, O. M., 101
Zenkevich, Prof. L. V., 11
Zernicke, Prof., 2, 3
Zirkonium, 328, 331
Zobell, Dr. Claude E., 239–41
Zuckerman, Prof. Solly, 255
— Committee, 201, 254

BOOKSHELF INDEX

Albert, Adrien: *Selective Toxicity*, 32
Allee, W. C.: *Co-operation Among Animals, with Human Implications*, 336
Annual Review of Nuclear Science, Vol. I, 1952, 300

Baldwin, Ernest: *Dynamic Aspects of Biochemistry*, 302
Bell, R. P.: *Acids and Bases*, 302
Bertalanffy, L. von: *Problems of Life*, 302
Bingham, Hiram: *Lost City of the Incas*, 66
Bourne, Geoffrey H.: *How Your Body Works*, 67
Buchanan, Andrew: *Film Making from Script to Screen*, 66
Buxton, John: *The Redstart*, 66

Castro, Josué de: *Geography of Hunger*, 233
Chamberlin, G. J.: *The C.I.E. International Colour System Explained*, 66
Clapham, A. R., Tutin, T. G. and Warburg, E. F.: *Flora of the British Isles*, 366
Collier, K. G.: *The Science of Humanity*, 301
Cornwell-Clyne, Major A.: *Colour Cinematography*, 233
Correll, D. S.: *Native Orchids of N. America*, 300

Davidson, Martin: *From Atoms to Stars*, 234
Duhamel, George: *Patrice Periot*, 233
Dunsheath, P.: *The Electric Current*, 31

Franck, Philipp: *Modern Science and its Philosophy*, 132
Frisch, Karl von: *Bees: Their Vision, Chemical Senses and Languages*, 32

Gray, D. E. and Martens, J. H.: *Radiation Monitoring in Atomic Defence*, 33

Hagberg, Knut: *Carl Linnaeus*, 131
Haszeldine, R. N. and Sharpe, A. G.: *Fluorine*, 33
Hughes, L. E. C. and Bremner, Jean P.: *Hutchinson's Pocket Technical Encyclopaedia*, 132

Jackson, J.: *Cooling Towers*, 66

Larsen, Egon: *Men Who Changed the World*, 300
Ley, Willy and Bonestell, Chesley: *The Conquest of Space*, 301
Lum, Peter: *The Stars in Our Heaven*, 234
Lundegardh, H.: *Leaf Analysis*, 301

Macdonald, J. A.: *Introduction to Mycology*, 32

National Bureau of Standards Handbook: *Recommendations for Waste Disposal of Phosphorus-32 and Iodine-131 for Medical Users*, 234
Noller, Carl R.: *Chemistry of Organic Compounds*, 31

Piggott, Stuart and Daniel, Glyn, E.: *A Picture Book of Ancient British Art*, 100

Russell, R. C. H. and MacMillan, D. H.: *Waves and Tides*, 366

Shackle, G. L. S.: *Mathematics at the Fireside*, 234
Smith, Malcolm: *The British Amphibians and Reptiles*, 100
Smith, Stuart: *The Yellow Wagtail*, 66
Stevens, W. R.: *Principles of Lighting*, 100
Summerhayes, V. S.: *Wild Orchids of Britain*, 300

Tancock, E. O.: *Starting Astronomy*, 302
Taylor, F. Sherwood: *The Alchemists. Founders of Modern Chemistry*, 336
Tinbergen, N.: *The Study of Instinct*, 366

Vavilov, N. I.: *The Origin, Variation, Immunity, and Breeding of Cultivated Plants*, 232

Worthington-Stuart, Brian: *Collecting and Breeding Butterflies*, 31

9
9

orks, 326–7

cals, 165

1 *for Medi-*
of Organic

Glyn, E.: *A*
sh Art, 100

lan, D. H.:

tics at the
Amphibians

gtail, 66
ghting, 100
Orchids of

nomy, 302
Alchemists.
ry, 336
stinct, 366

Variation,
Cultivated

lecting and